

# **Material Safety Data Sheet**

Creation Date 19-May-2010

Revision Date 19-May-2010

**Revision Number 1** 

# 1. PRODUCT AND COMPANY IDENTIFICATION

Product Name

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Cat No.

**Synonyms** 

**Recommended Use** 

Company Fisher Scientific One Reagent Lane Fair Lawn, NJ 07410

Tel: (201) 796-7100

Acetophenone

AC102410000; AC102410010; AC102410025; AC102410050;

AC102410100; AC102412500

Methyl phenyl ketone; Phenyl methyl ketone.

Laboratory chemicals

**Entity / Business Name** 

Acros Organics One Reagent Lane Fair Lawn, NJ 07410 **Emergency Telephone Number** 

For information in the US, call: 800-ACROS-01 For information in Europe, call: +32 14 57 52

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Emergency Number, Europe: +32 14 57 52 99 Emergency Number, US: 201-796-7100

CHEMTREC Phone Number, US: 800-424-

9300

CHEMTREC Phone Number, Europe: 703-

527-3887

# 2. HAZARDS IDENTIFICATION

# WARNING!

# **Emergency Overview**

Combustible liquid. Harmful if swallowed. Irritating to eyes. May cause skin and respiratory tract irritation.

Appearance Light yellow Physical State Liquid odor aromatic

**Target Organs** 

None known.

**Potential Health Effects** 

**Acute Effects** 

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# **Principle Routes of Exposure**

Eyes Irritating to eyes.

**Skin** May be harmful in contact with skin. May cause irritation. **Inhalation** May be harmful if inhaled. May cause irritation of respiratory tract.

Ingestion Harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and

diarrhea.

Chronic Effects None known.

See Section 11 for additional Toxicological information.

Aggravated Medical Conditions No information available.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Haz/Non-haz

Component	CAS-No	Weight %
Acetophenone	98-86-2	>95

# 4. FIRST AID MEASURES

**Eye Contact** Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Obtain

medical attention.

**Skin Contact** Wash off immediately with plenty of water for at least 15 minutes. Get medical attention

immediately if symptoms occur.

**Inhalation** Move to fresh air. If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation

if victim indested or inhaled the substance; induce artificial respiration with a respiratory

medical device. Get medical attention immediately if symptoms occur.

**Ingestion** Do not induce vomiting. Call a physician or Poison Control Center immediately.

Notes to Physician Treat symptomatically.

# 5. FIRE-FIGHTING MEASURES

Flash Point 77°C / 170.6°F

Method No information available.

Autoignition Temperature 535°C / 995°F

**Explosion Limits** 

 Upper
 6.7 vol %

 Lower
 1.1 vol %

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon

dioxide.

Unsuitable Extinguishing Media
No information available.

Hazardous Combustion Products
No information available.

Sensitivity to mechanical impact
No information available.

### Sensitivity to static discharge

No information available.

### **Specific Hazards Arising from the Chemical**

Combustible material. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition.

### **Protective Equipment and Precautions for Firefighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

**NFPA** Health 2 Flammability 2 Physical hazards N/A Instability 0

### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions** Use personal protective equipment. Remove all sources of ignition.

Should not be released into the environment. **Environmental Precautions** 

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Methods for Containment and Clean Remove all sources of ignition. Soak up with inert absorbent material. Keep in suitable and

closed containers for disposal.

# 7. HANDLING AND STORAGE

Handling Wear personal protective equipment. Keep away from open flames, hot surfaces and sources

of ignition. Do not breathe vapors or spray mist. Avoid contact with skin, eyes and clothing.

Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat Storage

and sources of ignition.

# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and **Engineering Measures** 

safety showers are close to the workstation location.

**Exposure Guidelines** 

Component	ACGIH TLV	OSHA PEL	NIOSH IDLH
Acetophenone	TWA: 10 ppm		

Component	Quebec	Mexico OEL (TWA)	Ontario TWAEV
Acetophenone	TWA: 10 ppm		TWA: 10 ppm
·	TWA: 49 mg/m <sup>3</sup>		

NIOSH IDLH: Immediately Dangerous to Life or Health

**Personal Protective Equipment** 

Eye/face Protection

Skin and body protection **Respiratory Protection** 

Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166

Wear appropriate protective gloves and clothing to prevent skin exposure

Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Use a NIOSH/MSHA or European Standard EN 149 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

# 9. PHYSICAL AND CHEMICAL PROPERTIES

**Physical State** Liquid Light yellow **Appearance** odor aromatic

**Odor Threshold** No information available. No information available. Ηq 1.3 mbar @ 20°C **Vapor Pressure** Vapor Density No information available.

**Viscosity** 1.8 mPa.s at 20 °C

**Boiling Point/Range** 202°C / 395.6°F@ 760 mmHg

Melting Point/Range 19.6°C / 67.3°F

No information available. **Decomposition temperature** 

Flash Point 77°C / 170.6°F

**Evaporation Rate** No information available. 1.028

**Specific Gravity** 

Solubility No information available. log Pow No data available

**Molecular Weight** 120.15 Molecular Formula C8 H8 O

# 10. STABILITY AND REACTIVITY

**Stability** Stable under normal conditions.

**Conditions to Avoid** Incompatible products. Excess heat.

**Incompatible Materials** Strong oxidizing agents

Carbon monoxide (CO), Carbon dioxide (CO2) **Hazardous Decomposition Products** 

**Hazardous Polymerization** No information available.

**Hazardous Reactions.** None under normal processing..

# 11. TOXICOLOGICAL INFORMATION

# **Acute Toxicity**

Component Information

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation			
Acetophenone	815 mg/kg (Rat)	1760 mg/kg (Rabbit)	Not listed			

Irritation Irritating to eyes

**Toxicologically Synergistic** No information available.

**Products** 

**Chronic Toxicity** 

Carcinogenicity There are no known carcinogenic chemicals in this product

No information available. Sensitization

**Mutagenic Effects** Not mutagenic in AMES Test

**Reproductive Effects** No information available. **Developmental Effects** No information available.

**Teratogenicity** No information available.

**Other Adverse Effects** See actual entry in RTECS for complete information.

**Endocrine Disruptor Information** No information available

# 12. ECOLOGICAL INFORMATION

### **Ecotoxicity**

l	Component	Freshwater Algae	Freshwater Fish	Microtox	Water Flea
ĺ	Acetophenone	Not listed	Brachydanio rerio: LC50 =	EC50 = 15.5 mg/L 15 min	EC50 = 162 mg/L 48h
١			155 mg/L 96h	_	_

**Persistence and Degradability** Readily biodegradable. **Bioaccumulation/ Accumulation** No information available

Mobility

Component	log Pow
Acetophenone	1.58 - 1.73

# 13. DISPOSAL CONSIDERATIONS

**Waste Disposal Methods** Chemical waste generators must determine whether a discarded chemical is classified as a

hazardous waste. Chemical waste generators must also consult local, regional, and national

hazardous waste regulations to ensure complete and accurate classification.

Component	RCRA - U Series Wastes	RCRA - P Series Wastes
Acetophenone - 98-86-2	U004	-

# 14. TRANSPORT INFORMATION

Not regulated DOT

**TDG** Not regulated

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# 14. TRANSPORT INFORMATION

IATA Not regulated

IMDG/IMO Not regulated

# 15. REGULATORY INFORMATION

#### International Inventories

Component	TSCA	DSL	NDSL	<b>EINECS</b>	<b>ELINCS</b>	NLP	PICCS	<b>ENCS</b>	AICS	CHINA	KECL
Acetophenone	Т	X	-	202-708-	-		Х	Χ	Χ	Х	KE-
				7							28355
											X

# Legend:

- X Listed
- E Indicates a substance that is the subject of a Section 5(e) Consent order under TSCA.
- F Indicates a substance that is the subject of a Section 5(f) Rule under TSCA.
- N Indicates a polymeric substance containing no free-radical initiator in its inventory name but is considered to cover the designated polymer made with any free-radical initiator regardless of the amount used.
- P Indicates a commenced PMN substance
- R Indicates a substance that is the subject of a Section 6 risk management rule under TSCA.
- S Indicates a substance that is identified in a proposed or final Significant New Use Rule
- T Indicates a substance that is the subject of a Section 4 test rule under TSCA.

XU - Indicates a substance exempt from reporting under the Inventory Update Rule, i.e. Partial Updating of the TSCA Inventory Data Base Production and Site Reports (40 CFR 710(B).

Y1 - Indicates an exempt polymer that has a number-average molecular weight of 1,000 or greater.

Y2 - Indicates an exempt polymer that is a polyester and is made only from reactants included in a specified list of low concern reactants that comprises one of the eligibility criteria for the exemption rule.

# **U.S. Federal Regulations**

### TSCA 12(b) Not applicable

#### **SARA 313**

Component	CAS-No	Weight %	SARA 313 - Threshold Values %
Acetophenone	98-86-2	>95	1.0

### SARA 311/312 Hazardous Categorization

Acute Health Hazard	Yes
Chronic Health Hazard	No
Fire Hazard	Yes
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

# **Clean Water Act**

Not applicable

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#### Clean Air Act

Component	HAPS Data	Class 1 Ozone Depletors	Class 2 Ozone Depletors
Acetophenone	X		-

### **OSHA**

Not applicable

#### CERCI A

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Component	Hazardous Substances RQs	CERCLA EHS RQs
Acetophenone	5000 lb	-

### **California Proposition 65**

This product does not contain any Proposition 65 chemicals.

#### State Right-to-Know

Component	Massachusetts	New Jersey	Pennsylvania	Illinois	Rhode Island
Acetophenone	X	X	X	X	X

# **U.S. Department of Transportation**

Reportable Quantity (RQ): N
DOT Marine Pollutant N
DOT Severe Marine Pollutant N

# **U.S. Department of Homeland Security**

This product does not contain any DHS chemicals.

# **Other International Regulations**

Mexico - Grade No information available

### Canada

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

# **WHMIS Hazard Class**

B3 Combustible liquid D2B Toxic materials



# **16. OTHER INFORMATION**

Prepared By Regulatory Affairs

Thermo Fisher Scientific Tel: (412) 490-8929

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**Revision Summary** "\*\*\*", and red text indicates revision

#### **Disclaimer**

The information provided on this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text.

**End of MSDS**